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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,955	12/29/2000	Pamela A. Binns	H16-25538	8564

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EXAMINER
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ALI, SYED J

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/751,955

Applicant(s)

BINNS, PAMELA A.

Examiner

Syed J. Ali

Art Unit

2195

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 13 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 1-38.  
Claim(s) withdrawn from consideration: None.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☒ Other: See Continuation Sheet.

✓ attached PTO-892

  
MENG-ALT. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY

Continuation of 5. Applicant's reply has overcome the following rejection(s): The rejection of claims 1-38 under 35 U.S.C. § 103 as being unpatentable over Biliris et al. (USPN 6,041,354) in view of Turner et al. (USPN 6,505,229) is hereby withdrawn.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant points out that the Final Rejection inadvertently failed to treat the limitations relating to the tasks being able to "request activation or deactivation at any time" and the slack determination "taking into account tasks that are activating and inactivating." Although the limitations were not explicitly shown within Lehoczky et al. ("Scheduling Periodic and Aperiodic Tasks Using the Slack Stealing Algorithm") (hereinafter Lehoczky), the reference does in fact account for "activating" and "deactivating" tasks in determining the amount of slack available. That is, the task table is "modified if any of the tasks [are] modified or the system undergoes a mode change." (pg. 178) Moreover, the table is initially populated with precomputed slack values, which is then updated as tasks enter a "busy" or "inactivity" period, i.e. "activating" or "deactivating." (pgs. 178-179). The table accounts for the work in the system "at any point in time" and is intended to calculate the available slack "at run time." (pgs. 178-179).

Applicant also submits Lehoczky does not teach the claimed features because Lehoczky was referenced in the background section, including the drawbacks of Lehoczky that the claimed invention ostensibly solved. However, this argument is unpersuasive for the simple reason that the Lehoczky reference relied upon in the rejection is not the same reference discussed in the specification. The reference discussed in the specification is entitled "An Optimal Algorithm for Scheduling Soft-Aperiodic Tasks in Fixed-Priority Preemptive Systems," which failed to account for a dynamic set of threads. In fact, the deficiencies of the Lehoczky reference addressed by Applicant are also addressed by the Lehoczky reference relied upon in the rejection. (pg. 173). Noting that building upon the basic slack stealing algorithm is an area undergoing active research, Lehoczky then describes a way to account for arriving tasks, hard deadline aperiodic scheduling, etc. Thus, the Lehoczky reference relied upon in the rejection does not suffer the same flaws as noted by Applicant in the specification, and actually seeks to remedy the same problems by accounting for the present state of tasks.

Continuation of 13. Other: Examiner requests the status of the copending applications in the specification be updated. The cross reference must be updated to include the relevant status, with PTO serial numbers or patent numbers where appropriate, on page 1, lines 9-18. The entire specification should be so revised. Additionally, the issued US patents and 18-month publications described by the specification are cited on the attached PTO-892. The additional references of Isham (USPN 6,964,048) and Kalavade et al. (USPN 6,393,433) are relevant for being directed to sharing execution capacity in a rate monotonic scheduling regime and ensuring that a rate monotonic schedule will not be violated upon updating the status of tasks in the system, respectively.